



VILLA TRIESTE
LAS VEGAS, NEVADA

55% improved energy efficiency over International Energy Conservation Code

35% indoor water use reduction

75% of construction waste diverted from the landfill

LEED® Facts

Villa Trieste
Las Vegas, NV

LEED for Homes
Certification awarded January 16, 2009

Platinum	91*
Sustainable Sites	17.5/22
Water Efficiency	7/15
Energy & Atmosphere	25/38
Materials & Resources	11/16
Indoor Environmental Quality	14/21
Locations & Linkages	7/10
Awareness & Education	2/3
Innovation & Design	7.5/11

*Out of a possible 136 points

The information provided is based on that stated in the LEED® project certification submittals. USGBC does not warrant or represent the accuracy of this information. Each building's actual performance is dependent on its unique design, construction, operation, and maintenance. Energy efficiency and sustainable results will vary.

VILLA TRIESTE

Interactive Homes Boost Energy Savings

Technology and Teamwork Help Villa Trieste Be as Green as It Can Be

PROJECT BACKGROUND

Constructing communities of comfortable, energy-efficient homes is not a new concept for Pulte Homes; its in-house designers and builders have embraced building science principles with help from the Environments For Living and U.S. Department of Energy's Building America programs for nearly 10 years. When Pulte's Las Vegas subdivision, Villa Trieste, was on the drawing board, the company set an ambitious goal of achieving LEED Platinum certification not for one, but for all 185 planned homes. This decision is consistent with its track record of staying on top of the needs and wants of prospective homebuyers, but it's also a response to the region's overtaxed energy and water supplies.

GETTING THE COMMUNITY INVOLVED

Although Pulte owes much of its success to teamwork within the company, strategic partnerships with others push affordability and sustainability to the next level. A grant from the U.S. Department of Energy, procured with University of Nevada, Las Vegas (UNLV) and NV Energy, provided \$7 million to defray the cost of roof-integrated photovoltaic systems. More importantly, the grant will pay for interactive energy dashboards in each home. Real-time monitoring and convenient, Internet-based controls will help Villa Trieste residents boost energy savings 10% beyond what high-performance construction alone would deliver.

The energy dashboards are also linked to a bigger energy-saving system – a regional smart grid, built and monitored by NV Energy. This grid gives NV Energy a more accurate view of energy consumption so it can regulate power production more safely and efficiently. It also allows the utility company to provide financial incentives to homeowners who help reduce peak electric demands. UNLV's Center for Energy Research will study the data to better understand homeowner's habits and to help NV Energy anticipate residential energy needs.

INTEGRATED STRATEGIES YIELD GUARANTEED RESULTS

Pulte uses a whole-system approach when designing and constructing its homes, starting with a durable and energy-saving envelope. Attics are insulated at the roof deck, ensuring that all ductwork is inside the home's conditioned space. Many of Pulte's trades people are company employees trained to understand the company's integrated systems approach to design and construction. These employees are responsible for air-sealing penetrations in each home's shell. This whole-system approach gives Pulte the confidence to provide buyers with an energy cost guarantee.

Pulte is building Villa Trieste with concern for all resources, not just energy. A combination of advanced framing methods, pre-cut framing packages, and a diligent recycling program reduces construction waste and also contributes to the homes' affordability. With water-sensing automated irrigation systems outside and low-flow fixtures inside, water demand should be as much as one third less than a typical Las Vegas home. The same dashboard that monitors energy also gives owners feedback on water consumption, giving them yet another useful conservation tool.

ABOUT PULTE HOMES

In 1950, 18-year-old high school graduate Bill Pulte started building homes in the Metro Detroit area. Since then, his company has grown into the largest home builders in the country, serving more than half of the continental United States. Pulte Homes has repeatedly received high marks for energy-efficiency, quality, and customer satisfaction by the National Association of Homebuilders Research Center and J.D Power and Associates. They have also been a leading builder in both the Building America and Environments For Living programs.

“With the LEED for Homes program, Pulte has elevated our product offering. Villa Trieste homeowners will enjoy homes that have lower utility bills, improved indoor air quality, are more durable and have a less impact on the environment as compared to a code built home.”

Walter Cuculic, Pulte Homes, Director of Sustainability



Designer/builder/developer: Pulte Homes
Landscape Architect: Sun City Landscapes
LEED Consultant: Pulte Homes
LEED for Homes Provider: Sonoran, LLC

Project Size: Four home models —1487, 1612, 1758 and 1777 sq. ft.
Number of bedrooms: 2 to 3 bedrooms
Home's Selling Price: Starting at \$227,990

Photography Courtesy of:

ABOUT LEED

The LEED® Green Building Rating System™ is the national benchmark for the design, construction, and operations of high-performance green buildings. Visit the U.S. Green Building Council's Web site at www.usgbc.org to learn more about LEED and green building.



www.usgbc.org
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